# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,129	07/24/2003	Peter Fox Sipp	PFS-I	3880
40023 7	7590 01/13/2005	EXAMINER		
DAVID M. C		CUEVAS, PEDRO J		
CARTER SCH	INEDLER & MONTEI			
56 CENTRAL AVENUE, SUITE 101			ART UNIT	PAPER NUMBER
P.O. BOX 2985			2834	
ASHVILLE, 1	NC 28802		DATE MAILED: 01/13/2005	5

Please find below and/or attached an Office communication concerning this application or proceeding.

·	Application No.	Applicant(s)				
	10/627,129	SIPP, PETER FOX				
Office Action Summary	Examiner	Art Unit				
	Pedro J. Cuevas	2834				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be timely within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 24 J	lulv 2003.					
•	s action is non-final.					
,—	· · · · · · · · · · · · · · · · · · ·					
Disposition of Claims						
4)  Claim(s) 1-19 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5)  Claim(s) is/are allowed. 6)  Claim(s) 1-19 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/o	wn from consideration.					
Application Papers						
9) ☐ The specification is objected to by the Examine 10) ☑ The drawing(s) filed on 24 July 2003 is/are: a)  Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the E	D⊠ accepted or b) objected to be drawing(s) be held in abeyance. See betion is required if the drawing(s) is objection is required.	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documen 2. Certified copies of the priority documen 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	ts have been received.  Its have been received in Applicationity documents have been received in the control of	on No ed in this National Stage				
Attachment(s)						
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da					
<ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date 7/24/03.</li> </ol>		Patent Application (PTO-152)				

### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-5, 8-10, 12-13, and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,625,124 to Ching-An.

Ching-An clearly teaches the construction of a sea wave impacted power generating device comprising:

a wheel assembly (Figures 1 & 2) including at least one rotatable wheel (3) adapted to interface with moving water to generate power;

a first elongated rigid structure (1), at least a portion of which being situated above said rotatable wheel, and being secured so that the moving water will not cause the rigid structure to move substantially;

said wheel assembly including at least one floatation member (7), includes at least one pontoon connected to said rotatable wheel, wherein said rotatable wheel will only be partially submerged in the moving water;

said wheel assembly connected to said first elongated rigid structure so that the wheel assembly is held in place in the moving water;

said wheel assembly is slidably connected (2) to said first elongated rigid structure so that rotatable wheel may move vertically as the level of the moving water changes (Figure 2);

first and second pontoons, said first pontoon located on one side of said rotatable wheel, and said second pontoon located on the other side of said rotatable wheel (Figure 1);

at least one rod (21) extending upwardly from each of said pontoons;

first and second hollow sleeves (22) extending downwardly from said first elongated rigid structure;

said rod from said first pontoon slidably received in said first sleeve and said rod from said second pontoon slidably received in said second sleeve;

a screen (231, 241) adapted to be located in close proximity to, but upstream from, said wheel assembly, permitting water to readily pass there through and reducing the likelihood that debris will interfere with said rotatable wheel;

a second elongated rigid member (11); said screen attached to said second elongated rigid member; said second elongated rigid member being secured so that said screen will be held in place in the moving water, and being removably attached to said first elongated rigid member, thereby further stabilizing said first elongated rigid member;

a funnel assembly (23) having a wide open end and a narrow open end, for increasing the speed of the moving water as the moving water contacts the rotatable Application/Control Number: 10/627,129

Art Unit: 2834

wheel, said narrow open end of said funnel assembly adjacent to said wheel assembly and attached to said second elongated rigid member; and

the distal end of each rod has a cap, the diameter of which is greater than the diameter of the hollow portion of its corresponding sleeve, whereby the rotatable wheel will not be lowered beyond a predetermined level.

### Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,625,124 to Ching-An.

Ching-An disclose the construction of a sea wave impacted power generating device as disclosed above.

However, it fails to disclose a raisable and rotatable structure which may be removed from the moving water.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the structure raisable and rotatable, since it has been held that making an old device portable or movable without producing any new and unexpected result involves only routine skill in the art. *In re Lindberg*, 93 USPQ 23 (CCPA 1952).

Application/Control Number: 10/627,129

Art Unit: 2834

5. Claims 7 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,625,124 to Ching-An in view of U.S. Patent No. 5,789,826 A to Kumbatovic.

Ching-An disclose the construction of a sea wave impacted power generating device as disclosed above.

However, it fails to disclose an elongated rigid structure forms a pad of a crane; said crane further including a mast and a winch.

Kumbatovic teach the construction of equipment to extract ocean wave power comprising elongated rigid structure (Figures 1 and 8) forms a pad of a crane; said crane further including a mast and a winch for the purpose of allowing movement of the power generating apparatus in all directions and placed in position in the water flow optimal for the generation of power.

It would have been obvious to one skilled in the art at the time the invention was made to use the elongated rigid structure disclosed by Kumbatovic on the sea wave impacted power generating device disclosed by Ching-An for the purpose of allowing movement of the power generating apparatus in all directions and placed in position in the water flow optimal for the generation of power.

- 6. With regards to claims 15 and 16, Ching-An in view of Kumbatovic discloses an anchor assembly (110) in the form of a concrete pillar; said elongated rigid structure being connected to said anchor assembly.
- 7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,625,124 to Ching-An in view of U.S. Patent No. 5,440,175 A to Mayo, Jr. et al.

Ching-An disclose the construction of a sea wave impacted power-generating device as disclosed above.

Application/Control Number: 10/627,129

Art Unit: 2834

However, it fails to disclose a rotational speed increaser connected to said rotatable wheel.

Mayo, Jr. et al. teach the construction of a waterwheel-driven generating unit comprising a rotational speed increaser (planetary gear system) connected to said rotatable wheel for the purpose of economically increasing the speed of the generator.

It would have been obvious to one skilled in the art at the time the invention was made to use the planetary gear system disclosed by Mayo, Jr. et al. on the sea wave impacted power generating device disclosed by Ching-An for the purpose of economically increasing the speed of the generator.

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,625,124 to Ching-An in view of U.S. Patent No. 4,872,805 to Horiuchi et al.

Ching-An disclose the construction of a sea wave impacted power generating device as disclosed above.

However, it fails to disclose a rotatable wheel including at least first and second cylindrical sections; each of said sections including a plurality of paddles for engagement with the moving water; the paddles of said first section being offset from the paddles of said second section.

Horiuchi et al. teach the construction of a water powered device comprising a rotatable wheel including at least first and second cylindrical sections, each of said sections including a plurality of paddles (65) for engagement with the moving water, the paddles of said first section being offset from the paddles of said second section (Figure 5), for the purpose of permitting the stacking and replacement of individual blades of the water wheels (Abstract).

Art Unit: 2834

It would have been obvious to one skilled in the art at the time the invention was made to use the paddle arrangement disclosed by Horiuchi et al. on the sea wave impacted power generating device disclosed by Ching-An for the purpose of permitting the stacking and replacement of individual blades of the water wheels.

#### Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (571) 272-2021. The examiner can normally be reached on M-F from 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pedro J. Cuevas January 10, 2005

> Nicholas Ponomarenko Primary Examiner Technology Center 2800